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PTO/SB/21 (08-00)

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<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)	Application Number	10/056,908	
	Filing Date	Jan 25, 2002	
	First Named Inventor	Hinkel, Christopher	
	Group Art Unit	1645	
	Examiner Name	Unknown	
Total Number of Pages in This Submission	6	Attorney Docket Number	TM0141-UT

**ENCLOSURES (check all that apply)**

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): PTO form 1449 -3 pgs. <del>indef.</del> plus 40 references. Stamped Return postcard
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Firm or Individual name	James E. Butler	Reg. No. 40,931	Customer No. 29748
Signature			
Date	May 16, 2002		

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Hinkel et al.  
Confirmation No. 2363  
Serial No. 10/056,908  
Filed January 25, 2002  
For METHODS OF ANALYSIS OF NUCLEIC ACIDS

May 16, 2002

**INFORMATION DISCLOSURE STATEMENT**

TO THE COMMISSIONER OF PATENTS,

SIR:

In accordance with 37 C.F.R. 1.97 and 1.98 and MPEP 609, and in compliance with the duty of disclosure set forth in 37 C.F.R. 1.56, Applicants enclose copies of the references listed on the attached PTO Form 1449 (modified) for consideration by the Patent and Trademark Office and to be made of record in the above-entitled application.

This Information Disclosure Statement is being submitted pursuant to 37 C.F.R. 1.97(b) in that Applicants believe that it is being filed before the mailing date of the first Office action on the merits. Accordingly, neither a statement nor fee under 37 C.F.R. 1.97(c) is required. If Applicants are mistaken, and the mailing date of the first Office action on the merits precedes the filing of this Information Disclosure Statement, Applicants authorize that the fee due under 37 C.F.R. 1.17(p) be charged to Deposit Account No. 50-2021.

Respectfully submitted,

James E. Butler, Ph.D., Reg. No. 40,931  
TORREY MESA RESEARCH INSTITUTE  
3115 Merryfield Row  
San Diego, CA 92121  
(858) 812-1260

Page 1 of 2



TM0141-UT  
PATENT

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I hereby certify that the foregoing Information Disclosure Statement in the application of Hinkel et al., Serial No. 10/056,908, filed January 25, 2002, is being deposited with the United States Postal Service as first class mail, postage pre-paid, and addressed to: Commissioner for Patents, Washington, D.C. 20231 on this 16th day of May, 2002.

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Sheet

3

of

3

**Complete if Known**

Application Number	10/056,908
Filing Date	1/25/2002
First Named Inventor	Hinkel et al.
Group Art Unit	1645
Examiner Name	Unknown
Attorney Docket Number	TM0141-UT

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AL	LIU et al., "Overlapping PCR for bi-directional PCR amplification of specific alleles: a rapid one-tube method for simultaneously differentiating homozygotes and heterozygotes." <u>Genome Res.</u> , 7:389-398, (1997).	
	AM	NEWTON et al., "Analysis of any point mutation in DNA: The amplification refractory mutation system (ARMS)." <u>Nuc. Acids Res.</u> , 17(7):2503-2516, (1989).	✓
	AN	NICHOLS et al., "Direct sequencing of the gene for Maryland/German familial amyloidotic polyneuropathy Type II and genotyping by allele-specific enzymatic amplification." <u>Genomics</u> , 5:535-540, (1989).	✓
	AO	SAMIOTAKI et al., "Dual-color detection of DNA sequence variants by ligase-mediated analysis." <u>Genomics</u> , 20:238-242, (1994).	✓
	AP	SHUMAKER et al., "Mutation detection by solid phase primer extension." <u>Human Mut.</u> , 7:346-354, (1996).	✓
	AQ	SMITH et al., "A rapid, sensitive, multiplexed assay for detection of viral nucleic acids using the FlowMetrix system." <u>Clin. Chem.</u> , 44(9):2054-2056, (1998).	✓
	AR	SOMMER et al., "A novel method for detecting point mutations or polymorphisms and its application to population screening for carriers of phenylketonuria." <u>Mayo Clin. Proc.</u> , 64:1361-1372, (1989).	✓
	AS	SYVÄNEN et al., "Identification of individuals by analysis of biallelic DNA markers, using PCR and solid-phase minisequencing." <u>Am. J. Hum. Genet.</u> , 52:46-59, (1993).	✓
	AT	WU et al., "Allele-specific enzymatic amplification of $\beta$ -globin genomic DNA for diagnosis of sickle cell anemia." <u>Proc. Natl. Acad. Sci. USA</u> , 86:2757-2760, (1989).	✓
	AU	ZIPFEL et al., "Complexity of the primary genetic response to mitogenic activation of human T cells." <u>Mol. Cell. Biol.</u> 9(3): 1041-1048, (1989).	✓
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Sheet **2** of **3**

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Application Number	10/056,908
Filing Date	1/25/2002
First Named Inventor	Hinkel et al.
Group Art Unit	1645
Examiner Name	Unknown
Attorney Docket Number	TM0141-UT

## **OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AA	BARANY et al., "Genetic disease detection and DNA amplification using cloned thermostable ligase." <u>Proc. Natl. Acad. Sci. USA</u> , 88:189-193, (1991).	
	AB	BRAY et al., "High-throughput multiplex SNP genotyping with MALDI-TOF mass spectrometry: Practice, Problems and Promise." <u>Hum. Mutat.</u> , 17:296-304, (2001).	✓
	AC	CHEN et al., "A homogeneous, ligase-mediated DNA diagnostic test." <u>Genome Res.</u> , 8:549-556, (1998).	
	AD	CHEN et al., "Fluorescence energy transfer detection as a homogeneous DNA diagnostic method." <u>Proc. Natl. Acad. Sci. USA</u> , 94:10756-10761, (1997).	
	AE	DAY et al., "Detection of steroid 21-hydroxylase alleles using gene-specific PCR and a multiplexed ligation detection reaction." <u>Genomics</u> , 29:152-162, (1995).	✓
	AF	DAY et al., "Electrophoresis for genotyping: Microtiter array diagonal gel electrophoresis on horizontal polyacrylamide gels, hydrolink, or agarose." <u>Anal. Biochem.</u> , 222:389-395, (1994).	✓
	AG	GRAVES, D., "Powerful tools for genetic analysis come of age." <u>Trends Biotechnol.</u> , 17:127-134, (1999).	✓
	AH	GROSSMAN et al., "High-density multiplex detection of nucleic acid sequences: oligonucleotide ligation assay and sequence-coded separation." <u>Nuc. Acids Res.</u> , 22(21):4527-4534, (1994).	✓
	AI	HSU et al., "Genotyping single-nucleotide polymorphisms by the invader assay with dual-color fluorescence polarization detection." <u>Clin. Chem.</u> , 47(8):1373-1377, (2001).	✓
	AJ	KOYAMA et al., "Structure of a cytotoxic t-lymphocyte-specific gene shows a strong homology to fibrinogen $\beta$ and $\gamma$ chains." <u>Proc. Natl. Acad. Sci. USA</u> 84:1609-1613, (1987).	✓
	AK	LANDEGREN et al., "A ligase-mediated gene detection technique." <u>Science</u> , 241:1077-1080, (1988).	✓

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Sheet 1 of 3

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Application Number	10/056,908
Filing Date	1/25/2002
First Named Inventor	Hinkel et al.
Group Art Unit	1645
Examiner Name	Unknown
Attorney Docket Number	TM0141-UT

**RECEIVED**  
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EACH CENTER 160012900**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	1	5,324,631		Helentjaris et al.	06/28/1994	
	2	5,459,037		Sutcliffe et al.	10/17/1995	
	3	5,645,995		Kieback	07/08/1997	
	4	5,695,937		Kinzler et al.	12/09/1997	
	5	5,712,126		Weissman et al.	01/27/1998	
	6	5,830,711		Barany et al.	11/03/1998	
	7	5,834,181		Shuber	11/10/1998	
	8	5,846,710		Bajaj	12/08/1998	
	9	5,866,330		Kinzler et al.	02/02/1999	
	10	5,871,697		Rothberg et al.	02/16/1999	
	11	5,888,819		Goelet et al.	03/30/1999	
	12	5,925,517		Tyagi et al.	07/20/1999	
	13	5,945,283		Kwok et al.	08/31/1999	
	14	5,962,233	With-drawn	Livak et al.	10/05/1999	
	15	6,150,095		Southern et al.	11/21/2000	
	16	6,268,222	B1	Chandler et al.	07/31/2001	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	17	PCT	WO 98/51789	A2&A3	Display Systems Biotech	11/19/1998		
	18	PCT	WO 99/37814	A1	Luminex Corporation	07/29/1999		
	19	PCT	WO 01/13120	A1	Luminex Corporation	02/22/2001		

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